



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RB T103331-101
Job Sheet 184046



Part No: RB T103331-101

Job Qty: 6 ea

Part Name: Driver Bearing Removal Freewheeling Assembly



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/2/18

Job Tracking No:

Due Date: 10/26/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG RB T103331-101 Rev. A IPP Rev. 3 18.10.02 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	3 Ea	10/26/18	10/26/18	0.00	0.00	Start Up Machining-3		JK 18-10-17
120	CNC Lathe	3 pcs	10/26/18	10/26/18	0.00	0.30	MORI SL2500Y		JK
130	QC	3 pcs	10/26/18	10/26/18	0.00	0.00	QC2 Machining-4		JK
140	QC	3 pcs	10/26/18	10/26/18	0.00	0.00	QC8 Machining-4		JK 18-10-17
170	Outsource	3 pcs	10/26/18	10/26/18			GRO002-VC	10	JK
180	Packaging	3 pcs	10/26/18	10/26/18	0.00	0.00	Packaging2		JK OCT 26 2018
190	QC	3 pcs	10/26/18	10/26/18	0.00	0.00	QC6		38
200	Packaging	3 pcs	10/26/18	10/26/18	0.00	0.00	Packaging3-1		MLC 9-89
210	QC21-FG	3 Ea	10/26/18	10/26/18	0.00	0.00	QC21		DAG 21 OCT 30 2018

Part Op 120 - 1-Machine as per DWG. FC FOLIO REV: DWG REV: 21 2-Debur
Descriptions: 140 - Engrave T/N and/or P/N number using MARKTRONIC engraver as per DWG.
170 - Issue P/O to GROUPE ALTECH; PO 41373 -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 4140 -Certificate of Conformity is required
OCT 18 2018 13 9-89

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140QT-R2.000	AISI 4140 Quenched & Tempered Steel Round Bar 2.000"	.4380 ft (146 ea)	90-Start up	
	Dia.	1.85	Operation	5082798-852

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-4140QT-R2.000	0	0	0



Container No: S119029



Part: RB T103331-101

Job No: 184046

Serial No/Batch: S119029

Revision: A

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

cifications

ould not be found.

Plex 10/2/18 9:05 AM dart.lacelle.linda

Date: 10/17/18

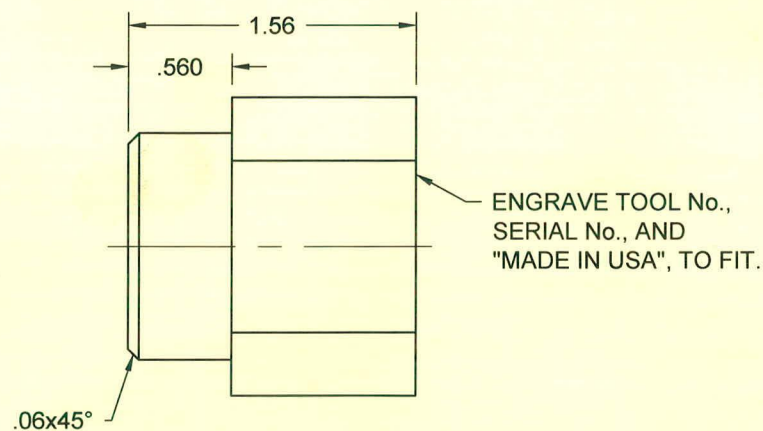
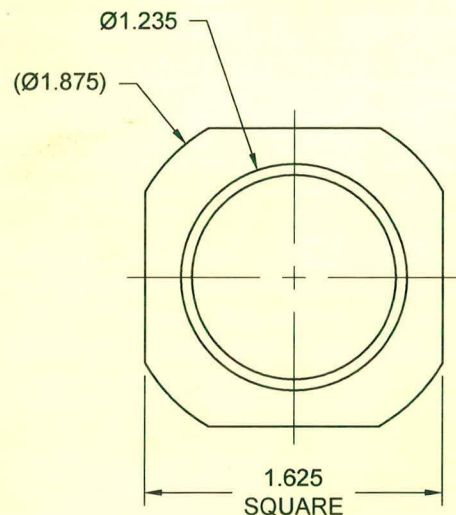
210P

OLD 5. 5. 1910

OLD 5. 5. 1910

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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL
A	CH'D Ø1.875 TO STOCK REFERENCE DIMENSION. CH'D TOOL NAME WAS REMOVER, BEARING AND BUSHING IS DRIVER, BRG. REMOVAL, FREEWHEELING ASSY.	12/18/13	RJC
			GE



NOTES

1. TEST PIECE RC. 28.
2. ALSO KNOWN AS 'BAR'.
3. MASTER CROSS REF. DATA # 5120-01-195-0706.

ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS
			-101	1	REMOVER	4140 Q&T	Ø1.875 x 1-3/4
ASSY #	ASSY #						

RED BARN MACHINE	
TITLE DRIVER, BRG. REMOVAL, FREEWHEELING ASSY.	
DWG NO. RB T103331-101	REV A
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	DRAWN BY: PERRITT
DECIMALS	APPROVED <i>D Wed</i>
.XXX ± .005	HEAT TREAT
XX ± .01	FINISH
X ± .1	SPEC BLACK OXIDE
FRACTIONS ± 1/32	USED ON MODEL
ANGLES ± 5°	BELL OH-58D KIOWA
UNLESS OTHERWISE SPECIFIED	WARRIOR
1. BREAK ALL SHARP EDGES	
.015 x 45° PR .015 R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1 : 1	DATE 9-11-09
	SHEET 1 of 1

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐ Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐		AGAINST DEPARTMENT/PROCESS Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____		Step #: _____		QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation				Disposition			
1144				Completed By			
				Lead hand / Supervisor Approval Verification			
				QC / QA Coordinator Approval			
Root Cause		FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041373**

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO041373

PO Date: 10/18/18

Due Date: 10/24/18

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pytm Terms: Net 60

Freight Terms:

Special Comments:

REVISE

E-MAILED

OCT 18 2018

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	183464	RB6872882-5	Ring -Issue P/O to GROUPE ALTECH; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 1018 -Certificate of Conformity is required	Firmed	-	10/24/18	6 pcs	0 pcs	6 pcs	\$6.00/pcs	\$36.00
2	178462	RBE2-10-1-01	Slide -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13964, CLASS 1; MIL-C-16173 GRADE 4 -Certificate of Conformity is required	Firmed	-	10/24/18	8 pcs	0 pcs	8 pcs	\$6.00/pcs	\$48.00

OCT 26 2018



Dart Aerospace Ltd.
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PURCHASE ORDER **PO041373**

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	184046	RB T103331- 101	Driver Bearing Removal Freewheeling Assembly -Issue P/O to GROUPE ALTECH; PO _____ -Black oxide finish, MIL-C- 13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF- 16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL- PRF-81309 and wipe off excess. -Material type; 4140 -Certificate of Conformity is required	Firmed	-	10/24/18	6 pcs	0 pcs	6 pcs	\$6.00/pcs	\$36.00

OCT 26 2018

DAS
38
9-89

Grand Total: \$120.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

CG

Plex 10/18/18 3:04 PM dart.lavoie.chantal

182



Certificat de Conformité / Certificate of Compliance

(013655-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

013655- 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
24-Oct-2018		Aman		041373 ✓				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	RB6872882-5 Rev.	RB6872882-5 ✓ BLACK OXIDE FINISH MIL-C-13924C CLASS 1 APPLY THIN LAYER OF OIL/CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MILL-C23411 A OR MIL-PRF- 81309 AND WIPE OFF ECXESS	BLACK-OXIDE CH	6	6	0	0	0
2	RBE2-10-1-01 Rev.	RBE2-10-1-01 ✓ 01 -BLACK OXIDE MIL-C-13964, CLASS 1; MIL-C-16173 GRADE 4	BLACK-OXIDE CH	8	8	0	0	0
3	RBT103331-101 Rev.	RBT103331-101 ✓ BLACK OXIDE FINISH MIL-C-13924C CLASS 1 APPLY THIN LAYER OF OIL/CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MILL-C23411 A OR MIL-PRF- 81309 AND WIPE OFF ECXESS	BLACK-OXIDE CH	6	6	0	0	0

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38
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Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.

